



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| | | | | |
|--|-------------|----------------------|------------------------------|------------------|
| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 10/772,236 | 02/06/2004 | Masayuki Takagi | XA-10032 | 6886 |
| 181 7590 02/20/2007 MILES & STOCKBRIDGE PC 1751 PINNACLE DRIVE SUITE 500 MCLEAN, VA 22102-3833 | | | EXAMINER LE, HUNG CHARLIE | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3663 | |
| SHORTENED STATUTORY PERIOD OF RESPONSE | | MAIL DATE | DELIVERY MODE | |
| 3 MONTHS | | 02/20/2007 | PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | | | | |
|------------------------------|------------------------|--|---------------------|--|
| Office Action Summary | Application No. | | Applicant(s) | |
| | 10/772,236 | | TAKAGI, MASAYUKI | |
| | Examiner | | Art Unit | |
| | Hung C. Le | | 3663 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 23 is/are pending in the application.
- 4a) Of the above claim(s) 8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 7, 9 - 23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>11/22/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/02/2006 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 10, 17 & 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 10:

Claim 10 recites the limitation "said part" in line 3. There is insufficient antecedent

basis for this limitation in the claim.

Claim 17 recites the limitation "said part" in line 12. There is insufficient antecedent basis for this limitation in the claim.

With respect to claim 18:

Claim 18 recites the limitation "said part" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 – 23 (Claim 8 was cancelled by applicant) are rejected under 35 U.S.C. 103(a) as being unpatentable over Hasegawa (US 6,351,886 B1) in view of Takahashi et al. (4, 320,824). Hasegawa discloses applicant claims limitations except for forming holes (1B, Fig. 3) and groove (47A, Fig. 3) through the shaft portion which are taught by Takahashi et al. (see Figs. 1 – 3).

Art Unit: 3663

With respect to claims 1, 9 & 17:

Hasewaga discloses: A method for manufacturing a clutch housing, comprising:

a first step of forming a work into a pre-product (Steps 1 – 6, Fig. 1) having a shaft (middle part of step 6, Fig. 1) portion and an outer drum portion far left & right portion in step 6) enclosing the shaft portion integrally with the shaft portion (see FIG. 1);

a second step of working the pre-product (Steps 6 & 7); including forming a hole in said shaft portion, said hole extending substantially perpendicular to an axial direction of said shaft portion; and

a third step of providing a spline (lower left & right part starting from step 6, fig.1) on an inner periphery of the outer drum portion by flow forming (steps 11 – 13), and forming the pre-product into an almost completed product (step 14, Fig. 1), wherein in the first step, an outer peripheral cylindrical portion of the outer drum portion is formed while being offset in an axial direction (see starting from step 6) with respect to the shaft portion so that it is not opposite, in a radial direction, a region where said hole is to be formed in the second step.

While patent drawings are not drawn to scale, relationships clearly shown in the drawings of a reference patent cannot be disregarded in determining the patentability of claims. See In re Mraz, 59 CCPA 866, 455 F.2d 1069, 173 USPQ 25 (1972).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method as disclosed by Hasewaga by the teaching of Takahashi et al. for lubricating and maintenance advantages (Takahashi et al, col 1, lines 45+) as such modification is no more than the use of a well known expedient within the field.

With respect to claims 3, 4 & 13:

Hasewaga further discloses: a step of surface finishing is conducted after the third step (see steps 15, 16 & 17 of Fig. 1).

With respect to claims 5, 15, 20 & 22:

Hasewaga further discloses: the first step is conducted by hot forging (Col. 11, Lines 14 – 15), and the third step is conducted by cold forging (Col. 12, Line 3).

With respect to claims 6, 7 & 14:

Hasewaga further discloses: the step of surface finishing includes grinding (See step 17 of FIG. 1).

With respect to claims 16, 21 & 23:

Hasewaga further discloses: the disk portion becomes substantially perpendicular to the axis of the shaft portion and the outer peripheral cylindrical portion becomes substantially parallel to the axis of the shaft portion (see step 18

of Fig. 1).

With respect to claims 2, 10, 11, 12, 18 & 19:

Hasegawa discloses applicant claims limitations except for forming holes (1B, Fig. 3) and groove (47A, Fig. 3) through the shaft portion which are taught by Takahashi et al. (see Figs. 1 – 3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method as disclosed by Hasegawa by the teaching of Takahashi et al. for lubricating and maintenance advantages (Takahashi et al, col 1, lines 45+) as such modification is no more than the use of a well known expedient within the field.

6. The statements of intended use or field of use, e.g., “wherein, whereby, etc...” clause provides language that suggests or makes optional but does not require steps to be performed or does not limit the scope of a claim or claim limitation (MPEP § 2106(II,C)). Accordingly, the metes and bound of the claim can not be ascertained by one having ordinary skill in the art.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung C. Le whose telephone number is

Art Unit: 3663

571-272-8757. The examiner can normally be reached on M-F: 07:30 am - 05:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information For published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


JACK KEITH
SUPERVISORY PATENT EXAMINER

HCL
02/10/07